

ABSTRACT OF THE DISCLOSURE

METHOD AND INSTALLATION FOR CARRYING OUT A THREE PHASE  
CHEMICAL REACTION UNDER PRESSURE

A gas siphon type reactor (10) is used to carry out a three phase chemical reaction under pressure, such as the reduction of uranyl nitrate to uranous nitrate by hydrogen, in the presence of a catalyst made up of platinum on a silica carrier. The control of the pressure in the reactor (10) is provided by regulating the liquid and gas flow rates from a high pressure separator (52), into which the liquid and the gas leaving the reactor (10) are routed. The liquid in the reactor (10) is tapped from a lateral branch pipe (32) fitted with a filter (36) and emerging in the upper area (30), behind a profiled wall (34).

Fig. 1